However, when the antenna element **114** is retracted in FIG. **2**, the only part of the antenna assembly active is now the base coil helix **112** since only the plastic top portion of the antenna element **117**, without an inner top helix, will be within the base coil **112**. The conductive portion **158**, below the top plastic cap **117**, forming the retractable portion of the antenna element **114** will reside inside the housing and below the base coil **112**. This conductive portion **158** will reside inside either a metal or a plastic straw **134** or in other space **134**, within the housing. If the straw **134** is metal, then the straw **134** is not physically connected or otherwise electrically connected to the metal fitting **412** above to prevent shorting of the base coil **112**.

In summary, a parallelogram or more specifically, a rhombus shaped base or bottom feature with fifteen degree parallel edges is molded to the bottom end of the antenna. The internal antenna cavity of the plastic communication housing is shaped also with a corresponding fifteen degree angle to serve as a guiding feature for the antenna. When the base or bottom of the antenna and the guiding feature of the antenna housing are aligned, the antenna will naturally tilt back at the desired fifteen degree or any other pre-defined angle.

What is claimed is:

1. An antenna assembly, comprising:

a housing having an angled tapered guide; and

an antenna element having an expanded base portion and a linear portion, the antenna element being movable between a slanted position wherein the antenna element is inclined from the housing and the expanded base portion of the antenna element is blocked at the angled tapered guide and a vertical position substantially within the housing wherein the antenna element is vertically retracted within the housing.

2. An antenna assembly, comprising:

a housing having a cavity aligned in a first axis and a base helix antenna with angled constricted exit guide surrounding the top of the cavity; and

an antenna element carried by the housing, the antenna element having a linear portion and an expanded bottom angled stopper portion corresponding to a portion of the shape of the angled constricted exit guide, the antenna element being movable between a first position wherein the linear portion is aligned in a second axis in response to the angled constricted exit guide forcing the expanded bottom angled stopper portion of the antenna element to pivot at the angled constricted exit guide as the antenna element is extended, and a second position substantially retracted within the housing wherein the linear portion is aligned in the first axis in response to the linear portion of the antenna element extended in the second axis forcing the expanded bottom angled stopper portion of the antenna element to pivot below the angled constricted exit guide as the linear element is constricted from retracting in the first axis.

3. The antenna assembly of claim **2**, wherein the housing includes a fixed active antenna portion with the angled constricted exit guide surrounding the top of the cavity.

4. The antenna assembly of claim **3**, wherein the fixed active antenna portion comprises a first helical base coil coupled to the antenna element when the antenna element is in the first position.

5. The antenna assembly of claim **4**, wherein the antenna element is approximately a half-wave or quarter-wave length antenna element when in the first position.

6. The antenna assembly of claim **5**, further comprising a cap portion protruding substantially vertically from the helix base coil when the antenna element is in the second position.

7. The antenna assembly of claim **3**, wherein the fixed active antenna portion is a helix.

8. The antenna assembly of claim **2**, wherein the expanded bottom angled stopper portion of the antenna element is substantially a parallelogram or a straight rod.

9. The antenna assembly of claim **2**, wherein the angled constricted exit guide of the base coil cavity has a first side aligned in the second axis and a second opposed side aligned in the first axis.

10. The antenna assembly of claim **9**, wherein the first side and the second opposed side of the angled constricted exit guide forms approximately a seven-to-fifteen degree angle between the second axis and the first axis.

11. The antenna assembly of claim **2**, wherein the expanded bottom angled stopper portion of the antenna element is substantially a rhombus.

12. The antenna assembly of claim **4**, wherein the angled constricted exit guide of the helix base coil comprises a funnel having a wider angled mouth and a smaller shaft, wherein the wider angled mouth encapsulates the first helical coil to provide a coil support and the smaller shaft has a first side aligned in the second axis and a second opposed side aligned in the first axis for forming the angled constricted exit guide.

13. The antenna assembly of claim **12**, wherein the first side and the second opposed side of the angled constricted exit guide forms approximately a seven-to-fifteen degree angle between the second axis and the first axis.

14. The antenna assembly of claim **13**, wherein the cavity has a first straight side forming an angle with the first side of the angled constricted exit guide for vertically aligning the antenna element.

15. The antenna assembly of claim **14**, wherein the cavity has an opposed second straight side spaced apart from the first straight side at a distance greater than the wider angled mouth.

16. The antenna assembly of claim **15**, wherein the opposed second straight side has a tapered edge forming an angle with the second opposed side of the angled constricted exit guide.

17. The antenna assembly of claim **2**, wherein the angled constricted exit guide comprises an acute aperture forming an inverted "V" acute angle having a straight side and an opposed slanted side or a straight section.

18. The antenna assembly of claim **2**, wherein the angled constricted exit guide comprises an acute aperture forming an inverted "V" acute angle of approximately seven-to-fifteen degrees.

19. A communication device, comprising:

transmitter; and

an antenna assembly coupled to the transmitter, the antenna assembly including:

a housing having an angled tapered guide; and

an antenna element having an expanded base portion and a linear portion, the antenna element being movable between a slanted position wherein the antenna element is inclined from the housing and the expanded base portion of the antenna element is blocked at the angled tapered guide and a vertical position substantially within the housing wherein the antenna element is vertically retracted within the housing.

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